HP SCVMM 2012 Console Integration Kit (v 2.0) User Guide

Abstract

This guide is intended for system administrators who use the HP SCVMM 2012 Console Integration Kit v2.0 and other HP applications and tools to manage virtual and physical hardware components in a Microsoft System Center Virtual Machine Manager (SCVMM) environment.

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1 Overview

The HP SCVMM 2012 Console Integration Kit v2.0 provides the following for SCVMM:

- Viewing HP OneView and Virtual Connect fabric components.
- Provisioning an HP OneView managed server by applying an HP OneView server profile, deploying an operating system with a SCVMM physical computer profile, and configuring the SCVMM logical networking and Virtual Connect networking by correlating the HP OneView server profile defined connections with the SCVMM physical computer profile defined network adapters.

This release adds:

- HP OneView support
- Server provisioning support

IMPORTANT: Deployment requires the installation of the HP ProLiant SCVMM 2012 Integration Kit.

The following table compares the features of HP OneView managed hosts and VCM managed hosts.

Table 1 Feature comparison

Feature	HP OneView managed host	VCM managed host
HP Fabric Management > Summary View	Yes	Yes
HP Fabric Management > Diagram View	Yes	Yes
HP Fabric Management > Configured Fabric Managers view	Yes	Yes
Add Capacity Wizard	Yes	No

2 Support matrix

Supported System Center products

- SCVMM 2012 R2 Console or later
- SCVMM 2012 R2 or later (for deployment)

Supported infrastructure

- HP OneView 1.10 (Hyper-V and VMware appliances)
- HP BladeSystems c3000 and c7000 Enclosures with Onboard Administrator
- HP Virtual Connect Flex-10, Flex-10/10D, or FlexFabric Ethernet Modules (firmware version 4.10 or later)
- 3PAR storage systems configured through FCoE fabric or using VC Fibre Channel modules

Restrictions:

- HP OneView does not support HP BladeSystems c3000 Enclosure.
- Private volumes, Boot-from-SAN, and storage systems other than 3PAR are not supported.
- iSCSI is only supported for Virtual Connect Manager.

Supported servers

BL420c Gen8	BL465c G6	BL490c G7	BL680c G7
BL460c G6	BL465c G7	BL495c G6	BL685c G6
BL460c G7	BL465c Gen8	BL620c G7	BL685c G7
BL460c Gen8	BL490c G6	BL660c Gen8	

Restrictions:

- HP OneView does not support ProLiant G6 servers and the ProLiant BL680c G7 server.

Supported target operating systems (for deployment)

The following operating systems are supported for deployment using the Add Capacity Wizard:

- Windows Server 2008 R2 SP1
- Windows Server 2012
- Windows Server 2012 R2

Restrictions:

- Configuring network adapters to be connected to logical switches is not supported on Windows Server 2008 R2.

Supported target servers (for deployment)

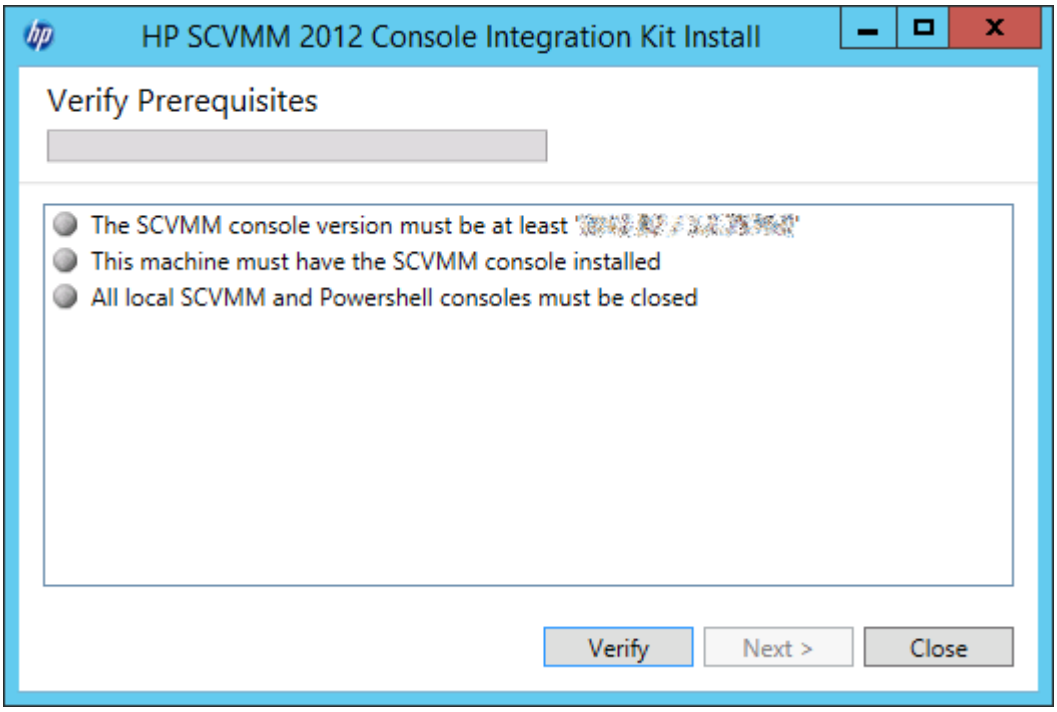
The following servers are supported for deployment using the Add Capacity Wizard:

BL420c Gen8	BL465c G7	BL620c G7
BL460c G7	BL465c Gen8	BL660c Gen8
BL460c Gen8	BL490c G7	BL685c G7

3 Installing and configuring the HP SCVMM 2012 Console Integration Kit

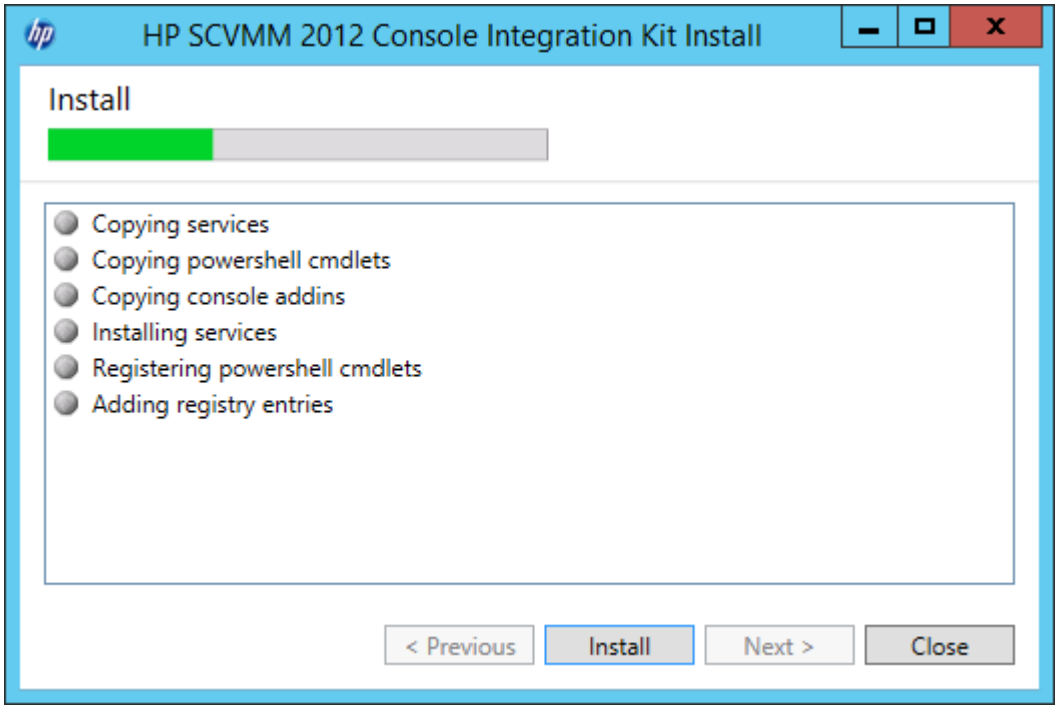
Installing

1. Ensure the following prerequisites are met:
   - The system meets the requirements detailed in the Support Matrix.
   - The logged in user has administrator level privileges and has been added to the SCVMM Administrator user role.
   - The HP Device Monitor Service (part of the HP SCOM Management Packs) is not installed locally.
   - The system has network access to all HP OneView appliances, VCMs, and iLO network interfaces being managed.
   - Ports 80 and 443 are enabled for external access.
   - Launch the installer with the **Run as administrator** option.
2. On each SCVMM 2012 console system, start the installation from the HP OneView for Microsoft System Center (formerly HP Insight Control for Microsoft System Center) image by executing autorun.exe. Click **Install**, and then click **HP SCVMM 2012 Console Integration Kit**.
3. Click **Install**.
4. On the **License Agreement** screen, click **Accept**.
5. On the **Verify Prerequisites** screen, click **Verify**. If the verification fails, make the necessary corrections and click **Verify** again.


HP SCVMM 2012 Console Integration Kit Install
Verify Prerequisites
The SCVMM console version must be at least
This machine must have the SCVMM console installed
All local SCVMM and Powershell consoles must be closed
Verify
Next >
Close

6. When the verification is complete, click **Next**.

7. On the **Install** screen, click **Install**.



8. When the installation is complete, click **Next**.
9. On the **Configure** screen, make note of what actions need to be taken, and then click **Next**.
10. On the **Summary** screen, click **Close**.
11. In the SCVMM console, navigate to **Settings > Console Add-ins**.
12. Click **Import Console Add-in**.
13. Set **Add-in path:** to %ProgramFiles%\HPSCVMMSupport\Addins\HPFabricManagement.zip.
14. Select **Continue installing the add-in anyway**.

    NOTE: The add-in is not signed. It does not pose a security threat, so this warning can be safely ignored.

15. Click **Next**.
16. Click **Finish**.
17. Repeat steps 11–16 for each user account.

Configuring

The HP Fabric Management Add-in needs to be configured with HP OneView appliances and Virtual Connect Managers.

1. At an administrator PowerShell command prompt, enter:

   ```
   PS C:\> add-pssnapin hp.scvmm.cmdlets
   ```

2. Use the Add-HPOneView or Add-VirtualConnect cmdlets to add devices. For example:

   ```
   PS C:\> add-hponeview 192.168.0.201 myname
   ```

For a complete usage details of all of the cmdlets, see "Reference" (page 20).

Upgrading

1. On each SCVMM 2012 console system, in the SCVMM console, navigate to **Settings > Console Add-ins**.
2. Select **HP Fabric Management**.
3. Click **Remove**.
4. Click **Yes**.
5. Repeat steps 1–4 for each user account.
6. Follow the steps in "Installing" (page 7).

Uninstalling

1. On each SCVMM 2012 console system, in the SCVMM console, navigate to **Settings > Console Add-ins**.
2. Select **HP Fabric Management**.
3. Click **Remove**.
4. Click **Yes**.
5. Repeat steps 1–4 for each user account.
6. Close the SCVMM 2012 console and any PowerShell consoles.
7. Go to the **Control Panel > Program and Features**.
8. Select **HP SCVMM 2012 Console Integration Kit Uninstall**.
9. Click **Uninstall**.
10. Follow the on-screen prompts.

4 Using the HP Fabric Management add-in

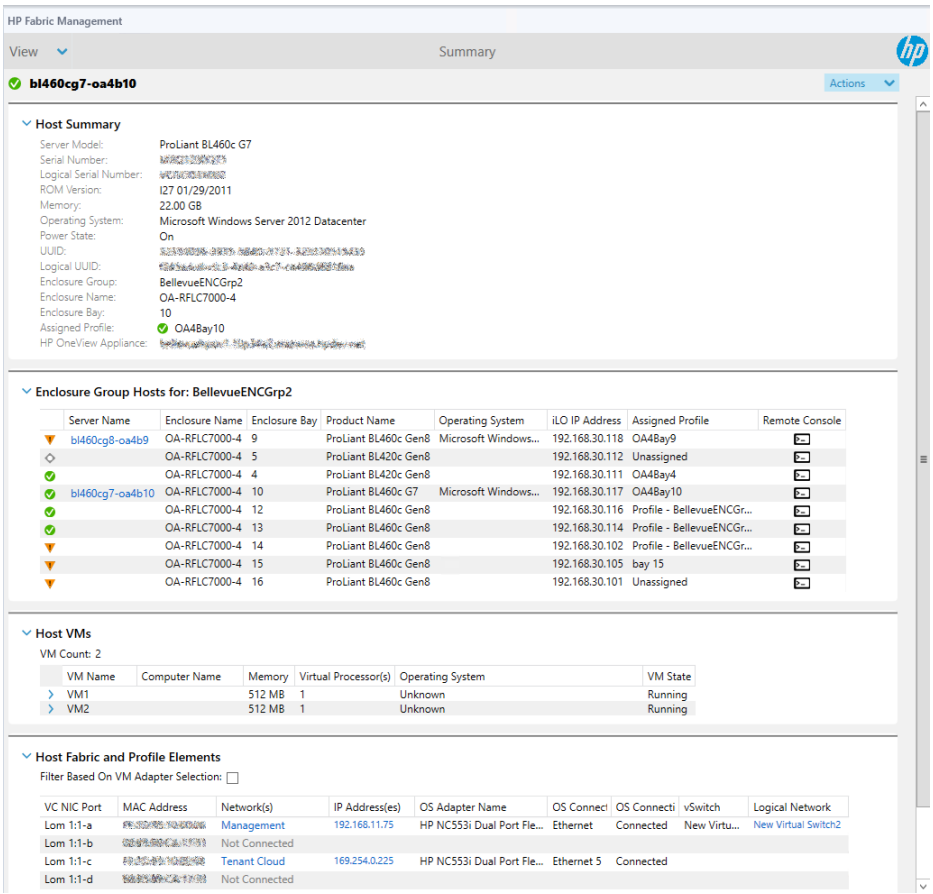
The HP Fabric Management add-in can be accessed in either the **VM and Services** pane or the **Fabric** pane by selecting a host group, cluster group, or host node, and then clicking the **HP Fabric Management** toolbar button.

The HP Fabric Management add-in provides several views.

View	Description
Summary	Provides a fabric summary about the selected host. Only available on host nodes.
Fabric Diagram	Displays a graphical relationship between a host and its VMs, networking, and fabric components. Only available on host nodes.
Configured Fabric Managers	Lists HP OneView appliances and VCMs that have been configured for management. Available on host groups, cluster groups, and host nodes.

Summary view

The **Summary** view provides a fabric summary with information about the selected host, its virtual machines, and all associated fabric elements.


HP Fabric Management
View
Summary
bl460cg7-oa4b10
Actions
Host Summary
Server Model: ProLiant BL460c G7
ROM Version: I27 01/29/2011
Memory: 22.00 GB
Operating System: Microsoft Windows Server 2012 Datacenter
Power State: On
Enclosure Group: BellevueENCGrp2
Enclosure Name: OA-RFLC7000-4
Enclosure Bay: 10
Assigned Profile: OA4Bay10
Enclosure Group Hosts for: BellevueENCGrp2
Server Name | Enclosure Name | Enclosure Bay | Product Name | Operating System | iLO IP Address | Assigned Profile | Remote Console
bl460cg8-oa4b9 | OA-RFLC7000-4 | 9 | ProLiant BL460c Gen8 | Microsoft Windows... | 192.168.30.118 | OA4Bay9
OA-RFLC7000-4 | 5 | ProLiant BL420c Gen8 | 192.168.30.112 | Unassigned
OA-RFLC7000-4 | 4 | ProLiant BL420c Gen8 | 192.168.30.111 | OA4Bay4
bl460cg7-oa4b10 | OA-RFLC7000-4 | 10 | ProLiant BL460c G7 | Microsoft Windows... | 192.168.30.117 | OA4Bay10
OA-RFLC7000-4 | 12 | ProLiant BL460c Gen8 | 192.168.30.116 | Profile - BellevueENCGr...
OA-RFLC7000-4 | 13 | ProLiant BL460c Gen8 | 192.168.30.114 | Profile - BellevueENCGr...
OA-RFLC7000-4 | 14 | ProLiant BL460c Gen8 | 192.168.30.102 | Profile - BellevueENCGr...
OA-RFLC7000-4 | 15 | ProLiant BL460c Gen8 | 192.168.30.105 | bay 15
OA-RFLC7000-4 | 16 | ProLiant BL460c Gen8 | 192.168.30.101 | Unassigned
Host VMs
VM Count: 2
VM Name | Computer Name | Memory | Virtual Processor(s) | Operating System | VM State
VM1 | 512 MB | 1 | Unknown | Running
VM2 | 512 MB | 1 | Unknown | Running
Host Fabric and Profile Elements
Filter Based On VM Adapter Selection:
VC NIC Port | MAC Address | Network(s) | IP Address(es) | OS Adapter Name | OS Connect | OS Connecti | vSwitch | Logical Network
Lom 1:1-a | Management | 192.168.11.75 | HP NC553i Dual Port Fle... | Ethernet | Connected | New Virtu... | New Virtual Switch2
Lom 1:1-b | Not Connected
Lom 1:1-c | Tenant Cloud | 169.254.0.225 | HP NC553i Dual Port Fle... | Ethernet 5 | Connected
Lom 1:1-d | Not Connected

It contains the following sections:

Section	Description
Host Summary	Displays the host's configuration. • Server state is only available for HP OneView managed hosts. • The **Enclosure Group** field is only available for HP OneView managed hosts. • The **Logical Serial Number** and **Logical UUID** fields are only displayed when the HP OneView or VCM profiles are configured to use virtual serial number or UUID.
Enclosure Group Hosts	Displays all of the HP OneView systems that are in the same enclosure group as the selected host. • This section is only displayed for HP OneView managed hosts. • The **Server Name** and **Operating System** fields are only displayed for SCVMM managed hosts. • Click the **Server Name** hyperlink to navigate to that host's Summary view. • Click the icon to launch that host's iLO remote console.
Host VMs	Displays all of the host's virtual machines. • Click the **>** icon to show that VM's Ethernet adapters.
Host Fabric and Profile Elements	Displays the host's FlexNIC configuration. • All FlexNICs will be reported, even ones not assigned to a profile. • For VCM managed hosts, FlexNICs that are connected to empty VC I/O bays may not be reported. • The **Network(s)** column is only for HP OneView or VCM profile assigned NICs. • The **IP Address(es)** column will be blank if no Network(s) is assigned to a FlexNIC in a profile. • For the **Network(s)**, **IP Address(es)**, and **Logical Network** columns, when applicable, click the hyperlink to bring up further details.

The status indicators are:

- means OK.
- means there is a problem. Navigate to the HP OneView or VCM web console to determine the root cause of the issue.
- means disabled.

To filter the **Host Fabric and Profile Elements** table to only elements that are connected to a particular virtual machine adapter based upon the vSwitch field:

1. In the **Host VMs** section, click the **>** icon next to the virtual machine name.
2. Select a virtual machine Ethernet adapter.
3. In the **Host Fabric and Profile Elements** section, check **Filter based on VM Adapter Selection**.

Actions

This view supports the following actions for HP OneView managed hosts:

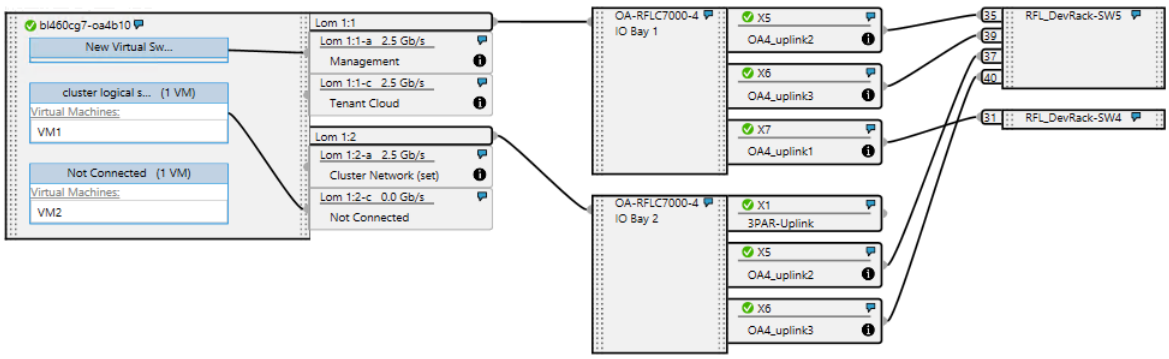
Action	Description
Launch Remote Console	Launches the iLO remote console for the current host.
Launch HP OneView	Launches the HP OneView appliance web console for the current host.
Refresh View	Refreshes the data.

This view supports the following actions for VCM managed hosts:

Action	Description
Launch Remote Console	Launches the iLO remote console for the current host. The host must be configured with the appropriate BMC settings, see "How to configure BMC settings" (page 15).
Launch OA	Launches the Onboard Administrator for the current host's enclosure.
Launch iLO Web	Launches the iLO web console for the current host. The host must be configured with the appropriate BMC settings, see "How to configure BMC settings" (page 15).
Launch VCM	Launches the VCM for the current host's domain. If VCEM is being used instead of VCM, a pop-up message will appear. To continue, manually launch VCM.
Refresh All Data	Refreshes SCVMM and VC data.
Refresh SCVMM Data	Refreshes SCVMM data.

Fabric Diagram view

The **Fabric Diagram** view displays a graphical relationship between a host, its VMs, its networking, and its fabric components, including downlink ports, I/O bays, uplink ports and if available, connected external switches.



Host and downlink ports *I/O bays and uplink ports* *External switches*

- The black lines show the connection points between components. Two black lines connected at the same vSwitch endpoint indicate NIC teaming.
- The status indicators are: ✅ means OK, ⚠ means there is a problem, and ◇ means disabled.
- Hover over the 💬 icon to get further details.
- Click the ℹ icon to get further details.
- The scale of the diagram can be changed using the Scale slider bar or by using **Ctrl+mouse** wheel.

Hosts and downlink ports

In the host diagram box, each list box represents a vSwitch and contains all virtual machines connected to that particular vSwitch.

- The number in parentheses following the vSwitch name shows the number of virtual machines connected to that vSwitch.
- If a virtual machine is connected to an internal or private vSwitch, it will not be listed.
- If a virtual machine is connected to multiple vSwitches, it appears in multiple vSwitch list boxes.
- If a group of virtual machines are not connected to a vSwitch, the virtual machine list header will be “Not Connected.”
- If a virtual machine is connected to the same vSwitch multiple times, then the number in parentheses following the VM name shows the total number of vSwitch connections.
- If a host NIC is connected to vSwitch and is not assigned to a Network(s), then the downlink port shows “Not Connected.”
- If a single vNet is configured on the FlexNIC, then its name is displayed. If multiple vNets are configured on the FlexNIC, then “<Network Set name> (set)” (for HP OneView) or “Multiple Networks” (for VCM) is displayed.

I/O bays and uplink ports

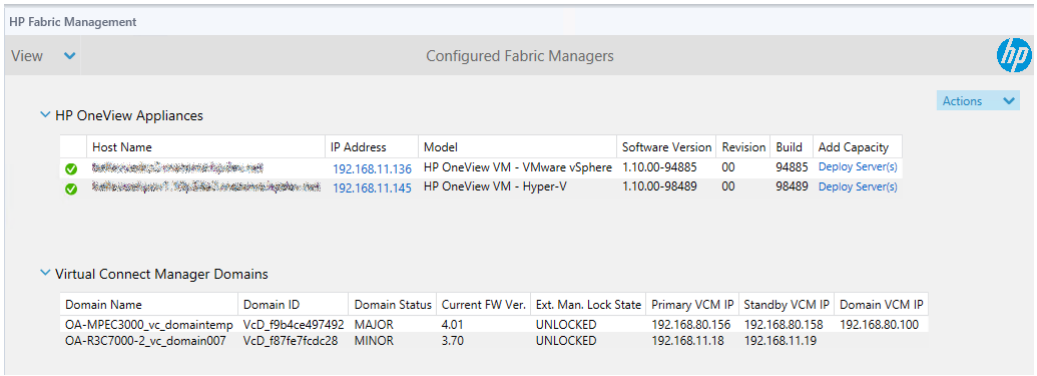
- For HP OneView managed hosts, the diagram will display all I/O bays the uplink ports are using.
- For VCM managed hosts, the diagram will only display uplinks from I/O bays the host is using.
- Uplink port status is only displayed for those I/O bays associated with Uplink Sets in HP OneView or vNets in VCM.

Actions

This view supports the same actions as the Summary view. For more information, see "Actions" (page 11).

Configured Fabric Managers view

The **Configured Fabric Managers** view lists HP OneView appliances and VCMs that have been configured for management by the corresponding cmdlets.



- For HP OneView appliances, click the **IP Address** hyperlink to launch the HP OneView appliance web console.
- For HP OneView appliances, click the **Deploy Server(s)** hyperlink to launch the HP Add Capacity Wizard. For complete details, see "Using the HP Add Capacity Wizard" (page 16).
- For Virtual Connect Manager Domains, if the configuration has changed, right-click on the domain, and then select **Refresh Domain Data**.

Actions

This view supports the following actions:

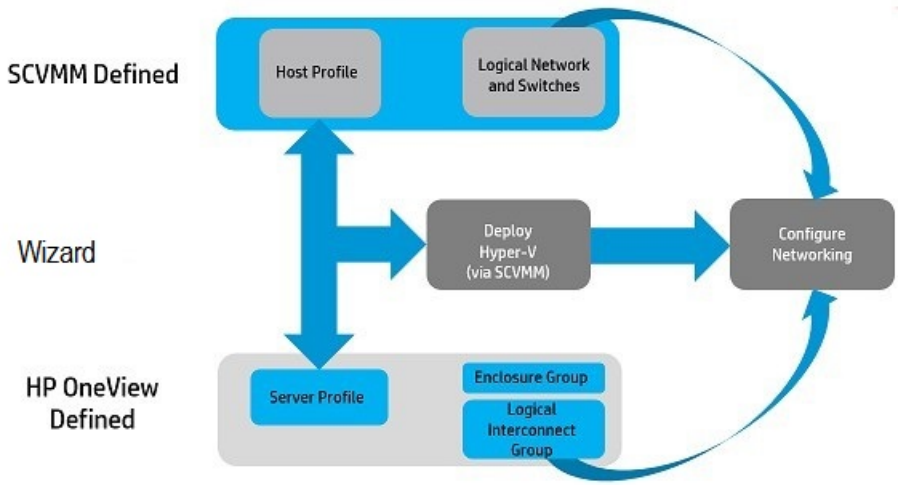
Action	Description
Refresh View	Refreshes the list of HP OneView appliances and VCM Domains.
Refresh Domain Data	Only available by right-clicking a Virtual Connect Domain. Refreshes the domain's configuration. Required when a new system has been inserted into an enclosure that is a member of the domain; when a system has been replaced in an enclosure that is a member of the domain; when a new profile has been assigned to a blade bay while using VC assigned UUID (Logical UUID); or when VC domain configuration has been changed.

How to configure BMC settings

1. Create a “Run As Account” containing the iLO username and password.
2. Right-click on the server in the **Host** list, and then select **Properties**.
3. Select **Hardware**.
4. Select **BMC Settings**.
5. Check **This physical computer is configured for out of band (OOB) management**.
6. Set **Power management configuration provider:** to **Intelligent Platform Management Interface (IPMI)**.
7. Set **BMC address:** to the iLO’s IP address.
8. Set **Run As Account:** to the account created in step 1.

5 Using the HP Add Capacity Wizard

The HP Add Capacity Wizard enables provisioning one or more HP OneView managed servers by applying an HP OneView server profile, deploying an operating system with a SCVMM physical computer profile, and configuring the SCVMM logical networking and Virtual Connect networking by correlating the HP OneView server profile defined connections with the SCVMM physical computer profile defined network adapters.



Fabric support

Table 2 SCVMM physical computer profile configuration

SCVMM physical computer profile configuration	Support
SCVMM physical server profile's role is VM Host	Yes.
SCVMM physical server profile's role is Windows File Server	No. The wizard will filter out these profiles.
HP OneView server profile has more Ethernet connections than network adapter defined in the SCVMM physical computer profile	Yes.
HP OneView server profile has less Ethernet connections than network adapter defined in the SCVMM physical computer profile	No. The wizard will display an error message if the selected HP OneView profile does not have enough connections to support the selected SCVMM PC profile. The wizard will indicate this as an invalid entry via a red bang.
SCVMM physical computer profile's management network adapter is physical and obtains it's IP address from DHCP or is allocated from a logical network	Yes.
SCVMM physical computer profile's management network adapter is defined as a virtual network adapter	No. The wizard will filter out these profiles.
One or more of the SCVMM physical computer profile's physical network adapters are defined to connect to a logical switch	Yes.
One or more of the SCVMM physical computer profile's physical network adapters are defined to obtain their IP address from DHCP or are allocated from a logical network	Yes.
One or more of the SCVMM physical computer profile's network adapters are defined to be virtual	Yes.

Table 3 HP OneView server profile configuration

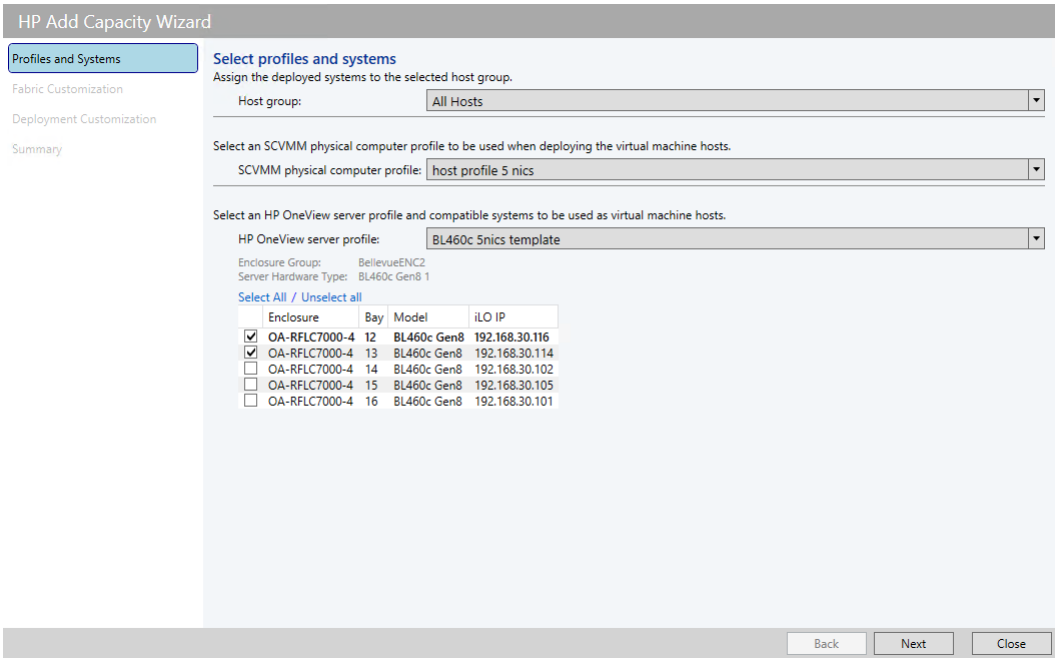
HP OneView server profile configuration	Support
HP OneView server profiles with "unassigned" server hardware	Yes.
HP OneView server profiles assigned to a bay that is either empty or contains a blade	No. The wizard will filter out these profiles.
HP OneView server profiles with a firmware baseline defined	Yes.
HP OneView server profiles with Ethernet connection defined	Yes.
HP OneView server profiles with Fibre channel connection defined	Yes.
HP OneView server profiles with local storage configuration defined	Yes.
HP OneView server profiles with SAN shared volumes defined	Yes.
HP OneView server profiles with SAN private volumes defined	No. The wizard will filter out these profiles.
HP OneView server profiles with Fibre channel connections set as primary or secondary boot	No. The wizard will filter out these profiles.
HP OneView server profiles that manage boot order	Yes.
HP OneView server profiles that manage BIOS settings	Yes.
HP OneView server profiles that use virtual or physical MAC, WWN, UUID, or serial numbers	Yes.
HP OneView server profiles that contain user specified MAC, WWN, UUID, or serial numbers	No. The wizard will filter out these profiles.

IMPORTANT: The Add Capacity Wizard will apply HP OneView server profiles with the name format `Profile – <Enclosure Group name> – <Enclosure name> – bay-<baynumber>` for selected servers in HP OneView. Do not create any HP OneView server profiles with this format.

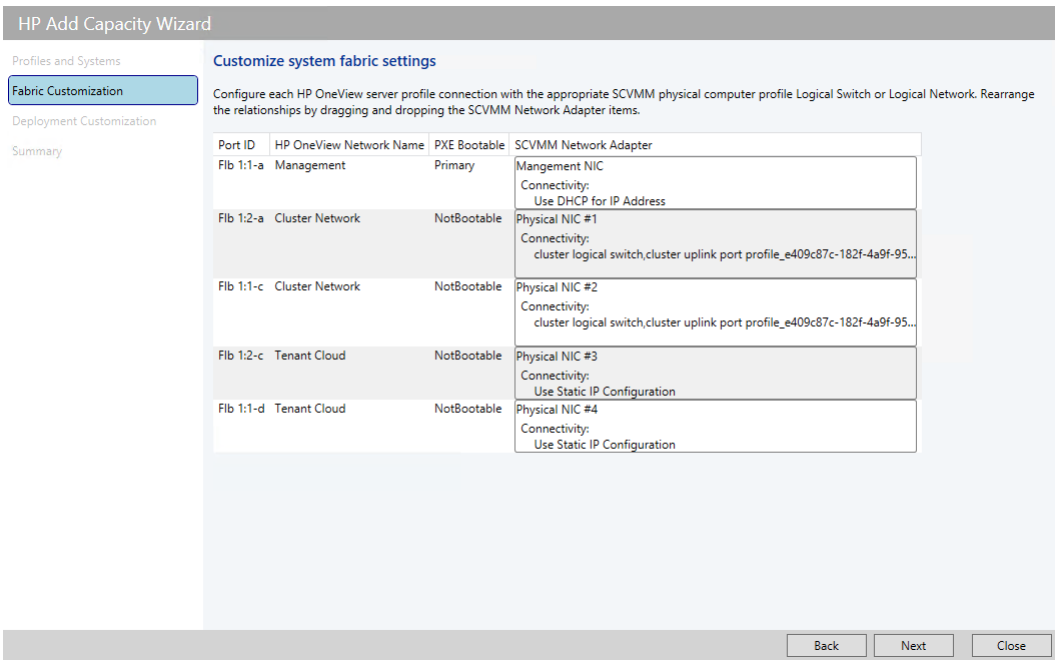
Using the HP Add Capacity Wizard

The HP Add Capacity Wizard is accessed in the HP Fabric Management **Configured Fabric Managers** view in the HP OneView Appliances table.

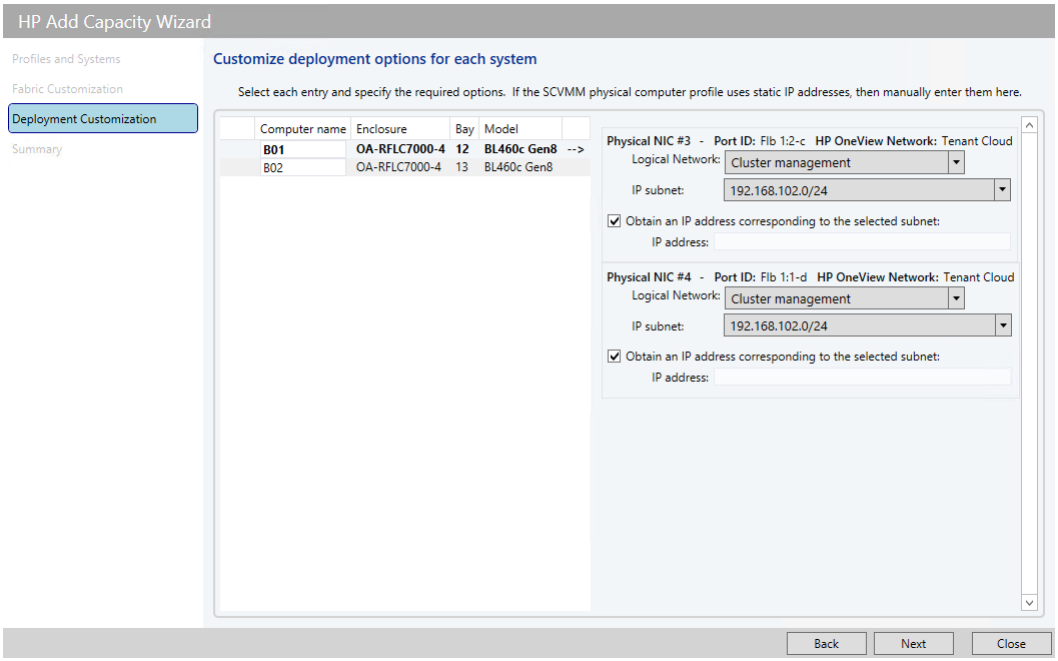
1. On the appropriate HP OneView appliance, click **Deploy Server(s)**.
2. On the **Profiles and Systems** screen, select the host group, profiles, and systems, and then click **Next**.


HP Add Capacity Wizard
Profiles and Systems
Fabric Customization
Deployment Customization
Summary
Select profiles and systems
Assign the deployed systems to the selected host group.
Host group:
All Hosts
Select an SCVMM physical computer profile to be used when deploying the virtual machine hosts.
SCVMM physical computer profile:
host profile 5 nics
Select an HP OneView server profile and compatible systems to be used as virtual machine hosts.
HP OneView server profile:
BL460c 5nics template
Enclosure Group: BellevueENC2
Server Hardware Type: BL460c Gen8 1
Select All / Unselect all
Enclosure Bay Model iLO IP
OA-RFLC7000-4 12 BL460c Gen8 192.168.30.116
OA-RFLC7000-4 13 BL460c Gen8 192.168.30.114
OA-RFLC7000-4 14 BL460c Gen8 192.168.30.102
OA-RFLC7000-4 15 BL460c Gen8 192.168.30.105
OA-RFLC7000-4 16 BL460c Gen8 192.168.30.101
Back
Next
Close

3. On the **Fabric Customization** screen, map the SCVMM network adapters to the HP OneView connections, and then click **Next**.

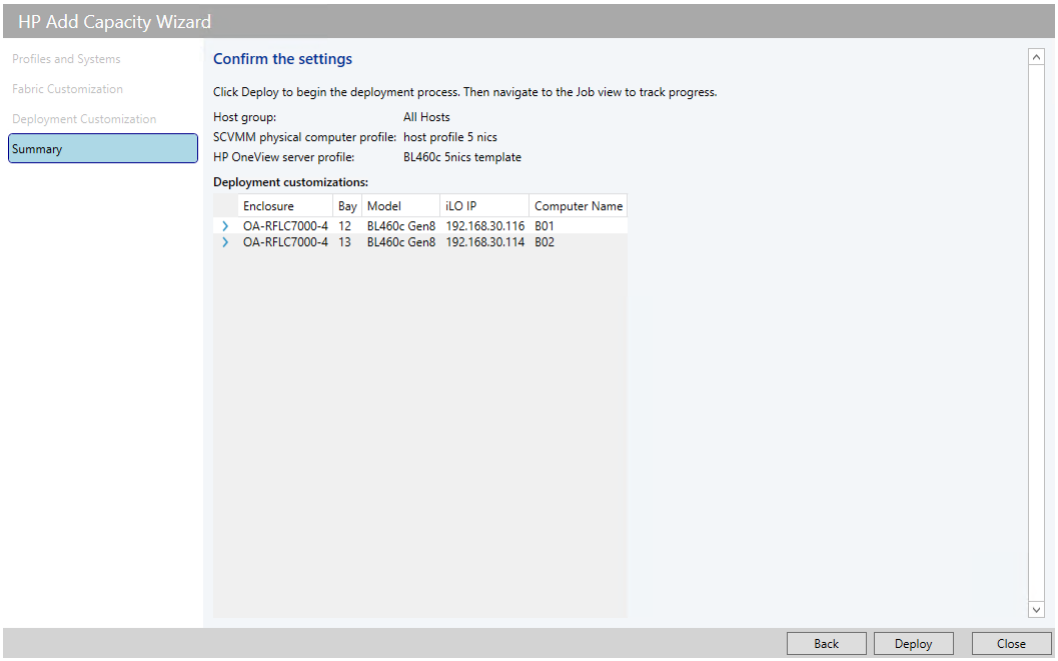

HP Add Capacity Wizard
Profiles and Systems
Fabric Customization
Deployment Customization
Summary
Customize system fabric settings
Configure each HP OneView server profile connection with the appropriate SCVMM physical computer profile Logical Switch or Logical Network. Rearrange the relationships by dragging and dropping the SCVMM Network Adapter items.
Port ID HP OneView Network Name PXE Bootable SCVMM Network Adapter
Flb 1:1-a Management Primary Mangement NIC Connectivity: Use DHCP for IP Address
Flb 1:2-a Cluster Network NotBootable Physical NIC #1 Connectivity: cluster logical switch,cluster uplink port profile_e409c87c-182f-4a9f-95...
Flb 1:1-c Cluster Network NotBootable Physical NIC #2 Connectivity: cluster logical switch,cluster uplink port profile_e409c87c-182f-4a9f-95...
Flb 1:2-c Tenant Cloud NotBootable Physical NIC #3 Connectivity: Use Static IP Configuration
Flb 1:1-d Tenant Cloud NotBootable Physical NIC #4 Connectivity: Use Static IP Configuration
Back
Next
Close

4. On the **Deployment Customization** screen, specify the required options, and then click **Next**.



5. On the **Summary** screen, click **Deploy**. The wizard performs three major tasks for each system:
   - Assign Profile
   - Submit deployment script
   - Power on system

IMPORTANT: Do not close the SCVMM console until these jobs are complete.



6 Reference

Cmdlets

The following table, "HP Fabric Management Cmdlets" (page 20), lists the PowerShell cmdlets used to configure the HP Fabric Management add-in.

IMPORTANT: Cmdlets should be executed at a PowerShell prompt under an administrator account or via **Run As Administrator**.

To import the cmdlet module, enter the following at a PowerShell command prompt:

```
add-pssnapin hp.scvmm.cmdlets
```

Table 4 HP Fabric Management Cmdlets

Cmdlet	Input parameters	Description
Add-HPOneView	• Address—the HP OneView appliance IP address or DNS name. • Credential—the HP OneView user name and password.	Adds the specified HP OneView appliance to be managed. All supported systems contained inside the configured appliance are eligible for management by the HP Fabric Management Add-in.
Remove-HPOneView	• Address—the HP OneView appliance IP address or DNS name.	Removes the specified HP OneView appliance from management.
Get-HPOneView	None	Shows all managed HP OneView appliances.
Set-HPOneView	• Address—the HP OneView appliance IP address or DNS name. • Credential—the HP OneView user name and password.	Changes the user name or password for the specified HP OneView appliance.
Add-VirtualConnect	• Address—the VCM IP address (either VC Domain or VC module) or DNS name. • Credential—the VCM user name and password.	Adds the specified VCM to be managed. All systems contained inside the configured domain are eligible for management by the HP Fabric Management Add-in.
Remove-VirtualConnect	• Address—the VCM IP address (either VC Domain or VC module) or DNS name.	Removes the specified VCM from management.
Get-VirtualConnect	None	Shows all managed VCMs.
Set-VirtualConnect	• Address—the VCM IP address (either VC Domain or VC module) or DNS name. • Credential—the VCM user name and password.	Changes the user name or password for the specified VCM.

NT Events

The following table, "HP Fabric Management NT events" (page 21), lists the NT events that may be reported when a device connection fails. The events are entered in the HP Fabric Management log file. The event source is the HP Fabric Management Core.

These events can be caused by the following conditions:

- Communication with the device has been lost.
- Device failover has occurred.
- Device information is not yet available because the HP Common Services service is not running.

NOTE: These NT events are applicable only for VCM managed devices.

Table 5 HP Fabric Management NT events

NT event	Description
200	Connection error; cannot connect to common services.
210	HTTP request error.
220	Cannot deserialize data from common services.
250	The device instance has not been restored and has timed-out. HP Common Services may have been restarted resulting in this condition.
260	The device instance has not been restored and has timed-out. HP Common Services may have been restarted resulting in this condition.
300	HP Common Services device state changed to minor.
310	HP Common Services device state changed to major.
320	HP Common Services device state changed to critical.
330	A request cannot be processed by the HP Fabric Management Add-in because one of its dependent components has not started.
400	The HP Fabric Management Add-in has detected that the device has already been configured for monitoring.
420	The HP Fabric Management Add-in has detected that the device credentials already exist. This device is already configured for monitoring.
430	The HP Fabric Management Add-in encountered an error while attempting to process credential information for the device. Check the following: • The device configuration information is correct and the device is up and running on the network. • HP Common Service is running.
440	The HP Fabric Management Add-in was unable to discover the device. Please check the connection and configuration for the device and try to discover the device again.
450	The HP Fabric Management Add-in was unable to authenticate with the device. Please check the credentials for the device and try to discover the device again.
600	Unknown error occurred. Insure HP Fabric Management Add-in is correctly installed.

Installation Paths

The following directories are created:

- `<Program Files>\HPSCVMMSupport\Addins\`
  Contains the importable add-in zip file(s).
- `<Program Files>\HPSCVMMSupport\CmdLets\`
  Contains the Powershell cmdlets.
- `<Program Files> \HPSCVMMSupport\HPCS\`
  Contains HP Common Services component files and sub-directories to manage the VC domains.

- `<Program Files>\HPSCVMMSupport\HPCS\share`

  Contains config.xml and logging.xml, which are customized configuration files for use with the installation of HP Common Services. Also, contains password.xml file, which must be preserved if an upgrade or reinstallation is performed.

- `<Program Files>\HPSCVMMSupport\HPCS\postgresql.hp\`

  Contains the managed device database, which must be preserved if an upgrade or reinstallation is performed.

- `<Program Files>\Microsoft System Center 2012\Virtual Machine Manager\bin\AddInPipeline\AddIns\<domain>_<user>\HPFabricManagement`

  Where the add-in is imported to.

Services

The following services are installed to support VCM managed hosts:

- HP Common Services
- PostgreSQL
- Mosquito message broker

Registry

The following registry keys are created:

- `HKLM\SOFTWARE\Microsoft\Microsoft System Center Virtual Machine Manager Administrator Console\HP\Console`
- `HKLM\SOFTWARE\Hewlett-Packard\HPFabricManagement`
- `HKLM\System\CurrentControlSet\Services\eventlog\HP Fabric Management`

7 Troubleshooting

Reinstall or upgrade fails

To resolve these issues, uninstall the kit and start again with a fresh install.

Import Console Add-in wizard fails on Italian/French OS

While importing the HP Fabric Management add-in, an error occurs in the installation job tracking, making it necessary to cancel the wizard. Once the wizard is cancelled, the add-in installs successfully.

If the add-in has been removed and re-imported, then the add-in will not work

To resolve this issue, either navigate to a different pane and back, or close and re-open the console.

HP OneView appliance or VCM added using the cmdlet does not show up in the Configured Fabric Managers view

To resolve this issue, execute the **Refresh View** action.

VCM configuration changes do not show up in the Configured Fabric Managers view

To resolve this issue, right-click the VCM and select **Refresh Domain Data**.

If a VCM domain has been recreated, then the add-in may display an error

To resolve this issue, use the cmdlets to remove and then re-add the VCM.

If the HP OneView appliance IP address has changed, then the add-in will display an error and the Get-HPOneView and Set-HPOneView cmdlets will fail

To resolve this issue, use the cmdlets to remove and then re-add the HP OneView appliance.

If the VCM IP address has changed, then the Get-VirtualConnect cmdlet will not show updated information and the Set-VirtualConnect cmdlet will fail

To resolve this issue, do one of the following:

- In one of the VCM managed host's **Summary** view, execute the **Refresh All Data** action, then in the **Configured Fabric Managers** view, right-click on the VCM, and then select **Refresh Domain Data**, or
- Use the cmdlets to remove and then re-add the VCM.

If the HP OneView appliance or VCM password has changed, then add-in will display an error

To resolve this issue, use the appropriate Set- cmdlet to set the new password.

If a new host is added to an existing VCM, then the add-in will display an error

To resolve this issue, in the **Configured Fabric Managers** view, right-click on the host's VCM and select **Refresh Domain Data**.

VCM managed host reported as not managed

To resolve this issue, connect to VCM and select the Server Profile for this host. If the Blade Server Information reports that the UUID is not assigned any value, restart the VC module.

If an HP OneView or VCM assigned profile using logical UUID is deleted and a new profile is assigned to a host, then the add-in will display an error

To resolve this issue:

1. Remove the host associated with the old profile from the SCVMM console.
2. Rediscover the host.
3. For VCM managed hosts, in the **Configured Fabric Managers** view, right-click on the host's VCM and select **Refresh Domain Data**.

Launch Remote Console and Launch iLO Web actions are disabled for VCM managed hosts

To resolve this issue, configure the host with the appropriate BMC settings, see "How to configure BMC settings" (page 15) for details.

Launch action fails

To resolve this issue, verify that the SCVMM console system is on the same network as the intended device.

Refresh All Data appears to hang

If the add-in is unable to connect to the VCM domain during a **Refresh All Data** action, it can take up to eight minutes to fail.

To resolve this issue, either wait for the timeout failure or click **Cancel**, and then verify the VCM is reachable from the SCVMM console system.

Deploy server(s) link is disabled

The add-in prevents delegated Administrator profile users from launching the Add Capacity wizard.

Alerts not generated for Refresh All Data action if HPCS cannot communicate with VCM

An error will display in the SCVMM console if the **Refresh All Data** action is performed when the configured VCM is not available. The displayed error will not be logged into the event log.

To workaround this issue, execute the `Get-VirtualConnect` command to view alerts for this host.

To change the Launch action default browser

By default, the various Launch action will use Internet Explorer as the browser. To change this behavior, add the following registry value. In `HKEY_LOCAL_MACHINE\SOFTWARE\Hewlett-Packard\HPFabricManagement\Launch`, define DefaultBrowser (String) = <*full path of the browser to be invoked*>.

8 Support and other resources

Information to collect before contacting HP

Be sure to have the following information available before you contact HP:

- Software product name
- Hardware product model number
- Operating system type and version
- Applicable error message
- Third-party hardware or software
- Technical support registration number (if applicable)

How to contact HP

Use the following methods to contact HP technical support:

- See the Contact HP worldwide website:
  http://www.hp.com/go/assistance
- Use the Contact HP link on the HP Support Center website:
  http://www.hp.com/go/hpsc
- In the United States, call +1 800 334 5144 to contact HP by telephone. This service is available 24 hours a day, 7 days a week. For continuous quality improvement, conversations might be recorded or monitored.

Registering for software technical support and update service

Insight Management includes one year of 24 x 7 HP Software Technical Support and Update Service. This service provides access to HP technical resources for assistance in resolving software implementation or operations problems.

The service also provides access to software updates and reference manuals in electronic form as they are made available from HP. Customers who purchase an electronic license are eligible for electronic updates.

With this service, Insight Management customers benefit from expedited problem resolution as well as proactive notification and delivery of software updates. For more information about this service, see the HP OneView Services website: HP OneView Services.

Registration for this service takes place following online redemption of the license certificate.

How to use your software technical support and update service

As HP releases updates to software, the latest versions of the software and documentation are made available to you. The Software Updates and Licensing portal gives you access to software, documentation, and license updates for products on your HP software support agreement.

You can access this portal from the HP Support Center:

http://www.hp.com/go/hpsc

After creating your profile and linking your support agreements to your profile, see the Software Updates and Licensing portal at http://www.hp.com/go/hpsoftwareupdatesupport to obtain software, documentation, and license updates.

Warranty information

HP will replace defective delivery media for a period of 90 days from the date of purchase. This warranty applies to all Insight Management products.

HP authorized resellers

For the name of the nearest HP authorized reseller, see the following sources:

- In the United States, see the HP U.S. service locator website:
  http://www.hp.com/service_locator
- In other locations, see the Contact HP worldwide website:
  http://www.hp.com/go/assistance

Related information

For more information on HP OneView, see www.hp.com/go/oneview.

There are separate user guides for each of the features in HP OneView for Microsoft System Center v 7.4 and later (formerly HP Insight Control for Microsoft System Center). For the complete set of HP OneView documentation, see the Information Library website: http://www.hp.com/go/ovsc/docs. For the complete set of HP Insight Control for Microsoft System Center documentation (v 7.3.2 and earlier), see the Information Library website: http://www.hp.com/go/icsc/docs.

For additional related product information:

- HP Insight Management WBEM Providers documentation
- HP Insight Management Agents documentation
- HP ProLiant servers:
  http://www.hp.com/go/proliant

Typographic conventions

This document uses the following typographical conventions:

Book title	The title of a book. On the web, this can be a hyperlink to the book itself.
`Command`	A command name or command phrase, for example `ls -a`.
`Computer output`	Information displayed by the computer.
Ctrl+x or **Ctrl-x**	A key sequence that indicates you must hold down the keyboard key labeled **Ctrl** while you press the letter `x`.
`ENVIRONMENT VARIABLE`	The name of an environment variable, for example, `PATH`.
Key	The name of a keyboard key. **Return** and **Enter** both refer to the same key.
Term	A term or phrase that is defined in the body text of the document, not in a glossary.
`User input`	Indicates commands and text that you type exactly as shown.
`Replaceable`	The name of a placeholder that you replace with an actual value.
[ ]	In command syntax statements, these characters enclose optional content.
{ }	In command syntax statements, these characters enclose required content.
|	The character that separates items in a linear list of choices.

…	Indicates that the preceding element can be repeated one or more times.
WARNING	An alert that calls attention to important information that, if not understood or followed, results in personal injury.
CAUTION	An alert that calls attention to important information that, if not understood or followed, results in data loss, data corruption, or damage to hardware or software.
IMPORTANT	An alert that calls attention to essential information.
NOTE	An alert that contains additional or supplementary information.
TIP	An alert that provides helpful information.

9 Documentation feedback

HP is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback (docsfeedback@hp.com). Include the document title and part number, version number, or the URL when submitting your feedback.

Glossary

CDM	Custom Data Manager
DMC	Device Monitor console
DMS	Device Monitor Service
HPCS	HP Common Services
iLO	Integrated Lights-Out
OA	Onboard Administrator
OSD	Operating System Deployment
OV	HP OneView
PSP	HP ProLiant Support Pack
SCCM	System Center Configuration Manager
SCOM	System Center Operations Manager
SCUP	System Center Updates Publisher
SCVMM	Microsoft System Center Virtual Machine Manager
SPP	HP Service Pack for ProLiant
VC	HP Virtual Connect
VCM	Virtual Connect Manager
VM	Virtual Machine
vNet	A logical grouping of VC ports